REMARKS

Claims 2-11 and 13-22 are pending in the present application, of which, claims 3, 4, 14, 15, and 20-22 are independent claims. No new matter is added by these amendments.

Allowable Subject Matter

Claims 3, 4, 14 and 15 are allowed.

Claims 5-7, 9, 10 and 16-19 were objected to, but would be allowable if rewritten in independent form.

102 Rejections

Claims 21, 2, 8, 11, 13, 20 and 22 were rejected under 35 U.S.C. 102(e) as being anticipated by Tsourikov, *et al.* (U.S. Patent Number 6,167,370).

Applicant has reviewed and carefully considered the Examiner's remarks in the present Office Action, but believes that the claims in their current form distinguish over Tsourikov. For example, independent claim 21 requires that the problem statement extracted from the natural language query be as follows:

> a problem statement in a format X-A-O, S-A-X, S-X-O, or S-X-X, wherein S, A, and O are semantic elements in the natural language question, X indicates absence of an S, A, or O;

And the at least one of answer S-A-O is as follows:

> the at least one answer S-A-O includes the A and O, S and A, S and O, or S from the problem statement and an S, A, or O to replace each X in the problem statement, thereby completing the S-A-O format

In the Response to Arguments section of the Office Action, the Examiner points out that FIG. 13 shows "normalized" SAO Extractions. These normalized S-A-O extractions come from the user request in FIG. 7 – which is not a question. In any event, FIG. 13 shows that full S-A-Os and a partial S-A-O were both extracted from the user

input in FIG. 7. Thus, FIG. 13 extracts full and partial S-A-Os from a user input, but these are not the same as the claimed problem statements described above.

If, however, the full S-A-Os were ignored, and only the partial S-A-O in FIG. 13 were considered as a problem statement – just because it is a partial S-A-O extracted from the user's input, Tsourikov does not use this partial S-A-O in the same way the claimed problem statement is used.

In the present invention, the problem statement is the entity used to find answer S-A-Os (and their document links). In Tsourikov, keywords are used to find candidate documents – Tsourikov's partial S-A-O is not used to find answer S-A-Os.

Applicant notes that Tsourikov does use the S-A-Os and partial S-A-O in S-A-O matching to attempt to reduce the candidate set of documents down to a relevant subset of documents. In other words, if a full S-A-O from FIG. 13 is also an S-A-O of a candidate document, then that document is relevant. And if a partial S-A-O from FIG. 13 were found in a candidate document, then that may also be a relevant candidate document. That is, the S-A-Os in Tsourikov's FIG. 13 are merely used to winnow down the full set of candidate documents to a relevant subset of candidate documents. The full or partial S-A-Os in FIG. 13 were not used to find answer S-A-Os. In fact, the full or partial S-A-Os in FIG. 13 are not used to find anything; they are merely used in S-A-O matching to determine a relevant subset of the candidate documents. Note the problem statement in claim 21 is used to "*find* at least one answer S-A-O."

There is no discussion in Tsourikov of finding an answer S-A-O that replaces the "X" in the problem statement and then outputs the answer S-A-O with the X replaced as an answer to the natural language query. As discussed above, Tsourikov will try to match even a partial S-A-O to S-A-Os in a candidate document – for the purposes of finding a relevant subset of candidate documents. However, nowhere in Tsourikov is it mentioned that it would find an answer S-A-O that replaces the "X" in the problem statement, where that answer S-A-O is then output as a response to the query.

If Tsourikov teaches this, then where is the answer S-A-O that completes the partial S-A-O in FIG. 13? And if that could be found, where is it said that that answer S-A-O is output as a response to the natural language query?

Applicant is aware of Tsourikov's text at column 6, liens 37-67 and the note in FIG. 3 "displaying to user" flowing from boxes 26 and 28. Box 26 relates to "storing DB of new concepts" which has nothing to do with the answer S-A-Os as claimed. Box 26 relates to summaries of relevant documents – not answer S-A-Os.

The text at column 6, liens 37-67 merely relates to the S-A-O matching used to winnow down the candidate documents to a subset of relevant documents. But nowhere here does it talk about the following:

> the at least one answer S-A-O includes the A and O, S and A, S and O, or S from the problem statement and an S, A, or O to replace each X in the problem statement, thereby completing the S-A-O format

Nowhere in the Tsourikov does it say that a partial S-A-O from the user's input, is completed and output as an answer, where the elements (S, A, O) from the natural language query are maintained in the answer and a missing element "X" is replaced.

Closing Remarks

It is submitted that all claims are in condition for allowance, and such allowance is respectfully requested. If prosecution of the application can be expedited by a telephone conference, the Examiner is invited to call the undersigned at the number given below.

In connection with this matter, please charge any otherwise unpaid fees which may be due, or credit any overpayment, to Deposit Account No. 501798.

Respectfully submitted,

Date: Dec 6, 2010

Mills & Onello, LLP
Eleven Beacon Street, Suite 605
Boston, MA 02108
Telephone: (617) 994-4900, Ext. 4959
Facsimile: (617) 742-7774
J:\IMC\0043\FOA_100510\IMC0043_response100510FOA.doc

David M. Mello
Registration Number 43,799
Attorney for Applicant